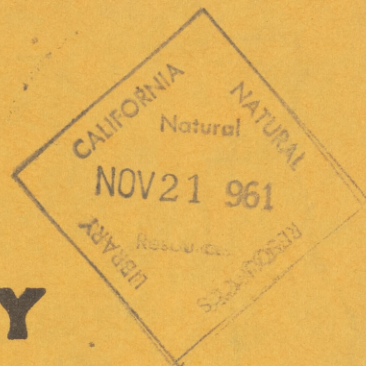


*State of
California*

DEPT. OF NATURAL RESOURCES

DIVISION OF FORESTRY



NEWS LETTER



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STATE OF CALIFORNIA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF FORESTRY NEWS LETTER

Published monthly in Sacramento for and by Division personnel. Its pages contain current facts, problems, and events relating to Forestry and to the experiences of Division personnel.

F. H. RAYMOND -

STATE FORESTER

ADMINISTRATIVE —DISTRICTS—

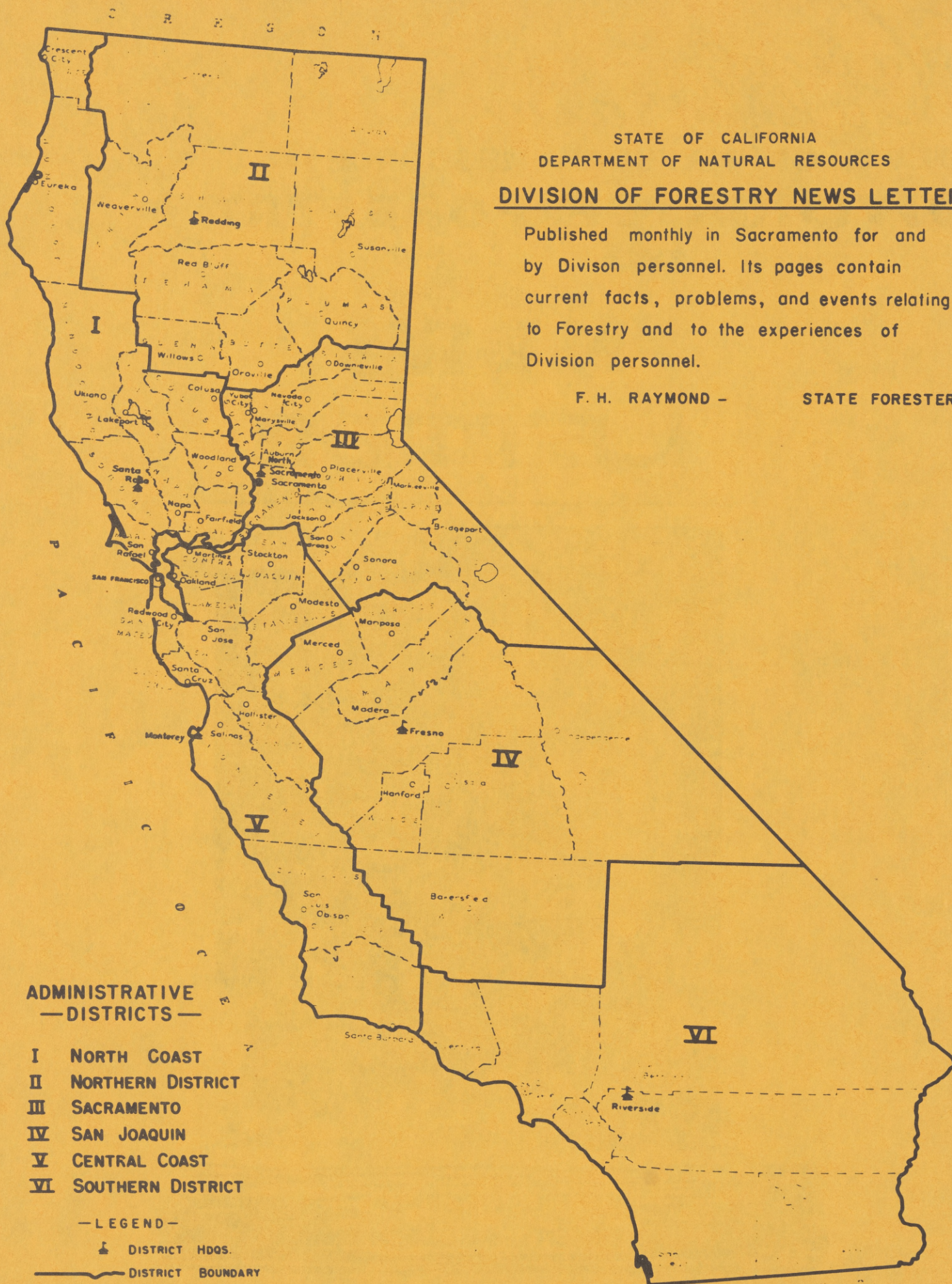
- I NORTH COAST
- II NORTHERN DISTRICT
- III SACRAMENTO
- IV SAN JOAQUIN
- V CENTRAL COAST
- VI SOUTHERN DISTRICT

—LEGEND—



DISTRICT HDQS.

— DISTRICT BOUNDARY



COVER PAGE

CECIL METCALF, District IV Deputy, grows them big down his way in Mountain Home State Forest. During a recent field trip, Cecil checked his height against the diameter of the fallen Doris Redwood. Not quite triple - but then the tree was 3000 years old and comparatively speaking, Cecil is just a baby.

APRIL ACTIVITIES

FIRE SUPPRESSION - Generally, the weather pattern during April was wet in the North and relatively dry in the South. As far as the South is concerned the exception to the above came during the last week of the month when a rather severe winter-type storm passed over California depositing a significant amount of precipitation State-wide.

Although there are some variables, the seasonal precipitation in the northern portion of the State ranges from a near normal to above normal while the converse of this situation is found in the southern half of the State. Generally, the statewide precipitation average for the season to date is about 80 to 85 percent of normal. This is approximately 15 to 20 percent higher than on this date last year.

FIRE CONTROL - GENERAL - Forestry and Bureau of Land Management representatives met to discuss fire protection problems on the Lassen grazing district in Lassen and Modoc Counties.

A meeting was held at Hiller Aircraft Corporation to make arrangements to demonstrate the Helicopter hose lay, Helipumper and Helitank at the Contra Costa Fireorama.

The Statistician and the representative for Public Law 566 (small watershed) conducted a Flying Squad training meeting in Redding.

AUTOMOTIVE - Preparations have been made to sell 26 miscellaneous vehicles at Davis Shop and Warehouse. Up to this sale we have continued to get above "Blue Book" prices.

Mobile Camp Trailers were inspected at Utility Body Company. The first two units are scheduled for completion (shell only) during April. The shells will then be moved to Fresno where cabinet work, plumbing, and other interior finish work will be done.

Assistance was given to the California Highway Patrol in conducting a series of brake tests. One of Forestry's new transports was used to provide the patrol with information for use in developing a standard for air brake systems. The Highway Patrol, under recent legislation, is responsible for establishing various standards for the transportation of heavy loads.

FIRE WEATHER - Contact was made with the 55th Weather Reconnaissance Squadron at McClellan Air Force Base to explore the possibilities of a cooperative study of thunderstorm clouds and related air mass meteorology. Due to a reduced operational budget at the present time, even their regular activities are seriously restricted.

A contact was also made with the U. S. Weather Bureau to view their new Sacramento Radar installation. They indicated a decided interest in working with Forestry in a study of thunderclouds.

AGRICULTURAL FIRE PROTECTION - Rangers Banks and Dunwoody completed preparation of an 18 hour course on Fire Control techniques in forested areas to be given to municipal and fire protection district firemen. This course will be held at the American River Junior College in Sacramento. A meeting was held with members of the U. S. Forest Service at their Regional Office in San Francisco to discuss the above mentioned training course and to get information from the U. S. Forest Service to be used in preparing the course.

The Schedule A representative conducted a half-day Flying Squad training course at the District I headquarters office in Santa Rosa. The Division was represented at the California Rural Fire Association meeting in Bakersfield by the State Forester, Chief Deputy, a few staff members and a representative from each of the six districts.

FIRE RESEARCH - The fire control research personnel of the Division of Forestry spent most of April in preparing and presenting research information on air tankers and fire retardants to three forest fire control inter-agency conferences held throughout the Sierra Region.

Considerable time was also spent in preparing a detailed statistical report on the Division's 1959 air tanker initial attack experiment.

WATERSHED MANAGEMENT - Public Law 566 - Forestry was represented at the Public Law 566 Progress Meeting, the State Soil Conservation Commission Meeting and the Bureau of Reclamation Meeting relative to land treatment (fire protection) in the watershed areas above structures to be built by the Bureau of Reclamation.

The State Forester's office and District V representatives met with a representative of the San Mateo County Fire Warden to review procedures and practices and proposed P.L. 566 projects in San Mateo County.

All interested fire protection agencies met to review and firm up the preliminary fire protection reconnaissance study of the Goleta Basin P.L. 566 project.

Sacramento and District representatives met with representatives of the U. S. Forest Service and Ventura County relative to P.L. 566 fire protection studies.

Representatives of Sacramento, Southern California, and the U. S. Forest Service reviewed the preliminary plans and policies on the Los Angeles River Basin Study.

Interested agencies (U.S.F.S. and C.D.F.) met with the Los Angeles City Fire Department to establish working procedures and responsibilities. They also met with the Los Angeles County Flood Control District to evaluate the possibilities of a proposed P.L. 566 project.

FIRE PROTECTION - STATE - FEDERAL COOPERATION - During the month the State Forester's representative attended inter-agency conferences at Tahoe, Richardson Springs, and Yosemite National Park. At each of the conferences he participated in the program as a member of a panel to discuss "The Care and Use of Inmates on Forest Fires."

A report was also made to the State Board of Forestry on the current status of the State Fire Plan for Protection of Private Lands Inside National Forests.

FIRE PREVENTION

State Forester F. H. Raymond, fire prevention and field staff members attended a meeting sponsored by the Southern Pacific Company to discuss and plan for fire prevention hazard reduction and educational activities where railroads are involved. In addition to Southern Pacific, other railroads represented were Western Pacific, Santa Fe, and Pacific Electric.

Fifty new 4' x 8' roadside forest fire prevention sign structures were received and distributed to the districts. New copy was suggested to an artist and subsequent preliminary art approved on paper poster for the 1960 posting of roadside signs.

Fire Prevention personnel presented a full day training course in District IV in Fresno County on fire prevention salesmanship at the local level.

Invitations were prepared and presented to over four hundred members of the California Fire Prevention Committee to attend the annual meetings of the committee in San Francisco and Los Angeles early in May. Considerable time was also devoted to making necessary arrangements for these meetings.

A final script for the 1960 production of motion picture trailers for theaters and spots and featurettes for television use were developed and final editing.

LAW ENFORCEMENT

Three cases were processed to the office of the Attorney General for review and collection of suppression costs. These were civil suppression cases.

The Great Northern Railway paid \$13.95 in the payment of suppression costs on one fire.

FOREST PRACTICE

The State Board of Forestry held public hearings in Sacramento on April 21, 1960, on the amended forest practice rules for the South Sierra and North Sierra Pine Forest Districts. Following the morning hearing, the Board permanently adopted the amended South Sierra Pine Forest Practice Rules. After the hearing in the afternoon, the Board adopted the amended forest practice rules for the North Sierra Pine Forest District, which have been filed with the Secretary of State to become effective June 1, 1960.

The Board on April 22 approved an alternate plan submitted by the Arcata Redwood Company, which permits a deviation from the seed tree requirements of the forest practice rules for the Redwood Forest District allowing the use of a clear-cutting system with provisions to insure adequate restocking of cutover lands of certain lands in Humboldt County.

STATE FORESTS

John C. Lampe of Tulare was the successful bidder for 2,382,000 board feet of timber sold from the Mountain Home State Forest in Tulare County. The sale was awarded at Visalia April 5, 1960. Mr. Lampe bid \$29.00 per thousand board feet for sugar pine, \$21.00 per M for ponderosa pine, \$5.50 per M for red and white fir, \$2.00 per M for incense cedar and \$10.00 per M for dead and down redwood. The estimated value to be received in this sale is \$43,837.50. The timber was marked for

cutting by professional foresters prior to sale. Demonstrations of the compatibility of timber management and recreation are a feature of timber sales on the Mountain Home State Forest.

The Al Thrasher Lumber Company, Inc., of Calpella was the successful bidder on April 19, 1960, for 8,244,000 of redwood, Douglas fir, and minor amounts of hemlock and white fir sold. Thrasher Lumber bid \$37.15 per thousand board feet for all species. This is the second major sale in the North Fork of Big River drainage. Estimated revenue from the sale is \$306,246. This drainage was made accessible by a bridge and roads constructed by Conservation Camp crews. The timber is all marked prior to cutting in accordance with sound silvicultural considerations. Logging should leave a good residual stand and greatly increase net timber growth on the 654 acre sale area.

SERVICE FORESTRY

Representatives of the State Forester met with other public and private members of the Small Woodland Council in Berkeley on April 28. The Small Woodland Council is an organization of public and private agencies and individuals devoted to obtaining good management of California woodlands in small ownerships. The progress in research in utilization of California hardwoods, the forestry program of the Soil Conservation Service, and the Tree Farm program sponsored by forest industry were discussed. The next issue of "Markets for Woodland Products in California" was discussed. This is a cooperative publication of the Division of Forestry, Agricultural Extension Service and the Council. The "Timber Tips" series of one-page information handouts was reviewed. These are printed by the Division of Forestry in cooperation with the Council. A tour of Mendocino County small woodland properties by the Council was set for June 28, 1960.

PEST CONTROL

The State Board of Forestry on April 21, 1960, approved four zones of infestation. They are Hat Creek-McCloud Zone in Lassen, Shasta, and Siskiyou Counties, the Trinity Zone in Shasta, Trinity, and Tehama Counties, the Mother Lode Zone in Sierra, Nevada, Yuba, El Dorado, Amador, Tuolumne, Calaveras, and Mariposa Counties, and the Sierra Zone in Mariposa, Madera, and Fresno Counties. The zones were declared to take care of present and future problems.

The Hat Creek-McCloud Zone is an enlargement of the present Hat Creek Zone to cover several trouble spots. The acreage involved is 1,835,000. The Trinity Zone is new and was declared to take care of a potential insect infestation involving seven large fires and involves 1,198,000 acres. The Mother Lode Zone is comprised of 3,686,000 acres and required the enlarging and merging of the Osborne Hill and Stanislaus Zones. In 1959 there were 22 large fires in this area. The Sierra Zone required amending the Miami Creek-Bass Lake Zone to include one trouble spot and five fire areas. The zone includes 555,000 acres.

The Chairman of the California Forest Pest Control Action Council presented a report on the forest insect problem areas in the California pine region. This report was requested by the Board of Forestry at its regular meeting on February 25, 1960. The report delineated the problem areas of the pine region with the recommendation that zones of infestation be declared to cover these areas with the viewpoint of future problems in mind.

NURSERY

The 1959-60 shipping season for trees from the Division's four nurseries closed April 1. Some stock, however, is being held in refrigeration for land owners

planting at high elevations where snow still covers the ground. A few late orders for 44,000 trees to be planted under these conditions were accepted, which brought the season's total of trees sold to 3,978,300.

A sixteen-man crew of inmates from the Iron Mine Conservation Camp commuted from the camp to the Davis headquarters nursery for a week to assist in hastening potting of some 32,000 broadleaved and coniferous evergreen seedlings. Use of the large crew was necessary because of increased production resulting from an increase in demand for this type stock. The transporting of the crew to Davis initiated the use of the new conservation camp buses which are to be used in transporting inmates to and from work projects and fires.

REFORESTATION

Scions that had been collected from select, 80-year old Douglas fir trees were grafted to 90, 10-year old trees of the same species located on the Jackson State Forest in Mendocino County. The purpose of the work is to test grafting techniques of forest species and to establish an experimental seed orchard to produce high quality Douglas fir seed. A reforestation studies project was laid out and planted using some 4,000 ponderosa pine and white fir seedlings on an old burn on land of a large timber operating company in Butte County. Permission to use the land was obtained by cooperative agreement between the Division and the company. The project is designed to test survival and growth of seedlings receiving different fertilizer treatments in the nursery and different age classes of seedlings. The area had been clear previously of a heavy stand of competing brush. The trees were planted by inmates from the Magalia Conservation Camp in Butte County. A small mechanical post hole auger which is carried and operated by one man was tested for the first time to evaluate its use in preparing planting holes. It appears to be very satisfactory in improving quality of planting as well as increasing the speed of planting operations. Conservation Camp crews planted 5,000 seedlings on Cuyamaca Rancho State Park in San Diego County in March in a continuing effort to rehabilitate the burn that occurred in 1950.

MAY ACTIVITIES

FIRE SUPPRESSION

While the hot weather and lack of precipitation in the southern one-half of California caused a continuation in the drying of fuels and ground surface, the northern one-half of the State experienced a rather violent winter-type storm that moved across California during the third decade of May. The benefits received from this storm soon dissipated due to the strong winds and hot weather that followed.

On those lands of State responsibility that are protected by the Division of Forestry, there were 67 forest fires and 61 so called non-forest fires (structures, vehicles, improvements, etc.). The forest fires burned 492 acres of timber, watershed, recreation, and range lands, and the non-forest fires caused damage losses of approximately \$246,019.00.

FIRE SUPPRESSION - MUTUAL AID

Fire Control personnel and equipment from the Lassen Ranger Unit assisted the Lassen National Forest on two fires near Lake Almanor of which one was a 90-acre brush and timber fire.

FIRE CONTROL - GENERAL

Meetings were held at Susanville and Burney with the U. S. Forest Service and members of the timber industry to discuss mutual fire problems. Pre-fire season meetings with U. S. Forest Service personnel were also held at Challenge and at Corning. A meeting of all fire chiefs in Siskiyou County was also held. Representatives of the Sacramento California Disaster Office and Senator Randolph Collier attended the latter meeting. A committee was appointed at this meeting to organize a Siskiyou County Fireman's Association.

F. H. Raymond, State Forester, officially declared a fire season to exist in District IV (San Joaquin) and District V (Central Coast) on May 16 and in District I (North Coast) District II (Sierra Cascade) and District III (Central Sierra) on May 20.

FOREST FIRE RESEARCH

The Division of Forestry cooperated with the U. S. Forest Service in conducting two air tanker and helicopter pilots training sessions for those pilots who plan to engage in the air program in 1960. The first session was held for the Northern California pilots at Davis on May 23 and 24, the second for the Southern California pilots at Porterville on May 26 and 27. Field personnel from the various districts participated in the various portions of this program.

A meeting of the California-Nevada Fire Research Council was held in Sacramento on May 5 and 6. A synopsis of most of the presentation made at this meeting is being prepared and will be submitted to the field.

The report "Air Drop Tests, Willows, Santa Ana, Ramona - 1955-59" was obtained from the State Printer's office and is available for distribution to anyone who might be interested in learning about some of the research that has been conducted in the past years on drops made from the Air Tankers.

Plans were made for a cooperative study between the Division of Forestry and the Pacific Southwest Forest and Range Experiment Station to test several fire retardants from ground units. The principle materials to be tested were viscous water and bentonite plus foaming agents. If the initial tests to be held at the Mariposa Airport early in June are successful, the two retardants will be further tested during the 1960 fire season from ground tankers in Mariposa County and in District V (Central Coast).

FIRE PROTECTION: STATE-COUNTY COOPERATION

An 18-hour course conducted at the American River Jr. College on "Fire Control Techniques in Forested Areas" was completed on June 1 with an average weekly attendance of 40 firemen. These firemen from cities and fire protection districts in the Sacramento Valley area showed a lot of interest in the techniques of forest fire control of wildland fires. The Division of Forestry was represented at the quarterly meeting of the Solano County Fireman's Association at Fairfield and at the annual California Fire Chiefs Association meeting held at Santa Monica. Deputy J. K. Mace of Southern California was elected first vice-president at the latter meeting. The Ranger in charge of Placer County arranged a meeting of representatives

of all fire protection districts in his ranger unit to discuss the "Acts" under which fire protection districts may be formed. Representatives from the State Forester's and Central Sierra's offices were also in attendance.

FIRE PROTECTION: STATE-FEDERAL COOPERATION

Representatives of the Department of Corrections, U. S. Forest Service, and Division of Forestry, attended a conservation camp administration conference regarding the existing and proposed conservation camp program.

An informational paper on the historical highlights of California State cooperation and financial transactions in respect to fire protection on National Forest lands and private lands inside National Forests has been completed and printed. Distribution will be to personnel of the Division of Forestry and the U. S. Forest Service.

WATERSHED MANAGEMENT - PUBLIC LAW 566

Activities during the month of May were as follows:

1. Reviewed the Adobe Creek Public Law 566 project with representatives of the Engineering Section and Lake County officials.
2. Attended monthly progress meeting of agencies interested in Public Law 566 planning.
3. Attended the semi-monthly meeting of the Capitol Section of the Soil Conservation Society of America.
4. Assisted the Rangers of Siskiyou, Shasta, and Tehama Ranger Units on their Public Law 566 problems.
5. Attended the monthly meeting of the Soil Conservation Commission.
6. Attended a portion of the conference on water research sponsored by the Water Resources Center, University of California.
7. Assisted District V (Central Coast) on the Soquel Creek Corps of Engineer's investigation.

RADIO - COMMUNICATIONS

Improvement of telephone service at Davis Warehouse, shops, and Nursery, and the matching funds budgetary request required by Office of Civil and Defense Mobilization for auxiliary power plant funds is in the preparation stages.

FIRE PREVENTION

Two meetings of the California Fire Prevention Committee were arranged and held; one in San Francisco on May 3 and the other in Los Angeles on May 10. In addition to evidenced interest in forest fire prevention this year, there was a significant increase in the number of interests represented at the meetings. At this time, it appears that cooperative effort during 1960 in the mass media educational campaign in California will surpass any previous year contributions by members.

Through discussion at conferences with Pacific Southwest Forest and Range Experiment Station and University of Southern California personnel, a work plan was developed for the 1960-61 Forest Fire Prevention Research agreement.

Final editing of a "shooting script" for the 1960 production of motion picture films for television and motion picture theater use was completed.

Settlement of suppression costs for 1958 railroad fires was completed upon receipt of payment from Southern Pacific Company and Atchison Topeka and Santa Fe Railroad Company.

LAW ENFORCEMENT

Eight cases were processed to the Attorney General's office for review and collection of suppression costs. These were civil suppression cases.

The Attorney General's office filed suit on one case for fire suppression costs in the amount of \$23,105.30.

Judgment has been rendered in favor of the State for the cost of suppression and court costs in connection with the Parker Logging Company fire in the amount of \$13,659.

A criminal law enforcement seminar was held in Nevada City on May 9, 10, and 11, 1960, and this seminar covered all phases of all law enforcement by the Division of Forestry from the felony and misdemeanor viewpoint.

Representatives of the State Forester's office met with officials of the Pacific Gas and Electric Company, Claims Department, relative to method of processing power line fires.

FOREST PRACTICE

Sweet Timber Company of Point Reyes was issued a timber operator's permit on May 17 under probation for one year. A permit for the corporation had been revoked for failure to comply with the Forest Practice Rules for the Redwood Forest Practice District and a new permit for a partnership had previously been denied until the company complied with the requirements of the Rules.

STATE FORESTS

Redding Pine Mills Inc., was awarded the 1960 timber sale on the Latour State Forest. This company submitted a bid of \$51.00 for pine, \$15 for fir and lodgepole pine, and \$8.00 for incense cedar on a per thousand board foot basis. Only one bid was received for the 3,011,000 feet of timber which must be cut and removed by October 1, 1960. The total sale value is estimated at \$77,726. The extension of valuable timber access roads are a part of this sale and the timber stand will be converted to a healthier, more rapid-growing forest as a result of this cutting.

Aborigine Lumber Company of Fort Bragg was the only bidder for some 852,000 board feet of logs on the Jackson State Forest. They submitted a bid of \$24.75 for redwood, white fir, and hemlock, and \$34.75 for Douglas fir logs. Expected receipts for these logs should amount to somewhat over \$25,000. These logs are a by-product of experimental cutting in young growth stands in Casper

Creek where the Division is studying different methods of cutting. Last year small group cutting was tried. This year a light selection and a heavy selection cut is being made. The logging is being done by Conservation Camp crews under Division supervision. The results obtained from these trials should provide the Division with some clues for management of its young growth stands on this forest, and provide information of value to tree farmers in this area.

National Plant Food Institute held a field seminar on soils and forest management for its members at the Institute of Forest Genetics at Placerville on May 25-26. The Division participated in this meeting acquainting those present with the work being accomplished on State Forests in California.

Claude H. Cranmer of Madera, when sealed bids were opened on June 1, was awarded a timber sale on Mountain Home State Forest for clearing power line right-of-way and removing high-risk trees from an area being developed as a campground. Cranmer's bid on a per thousand board foot basis was \$24.00 for sugar pine, \$23.00 for ponderosa pine, \$10.00 for Sierra redwood, \$3.21 for white and red fir, and \$2.50 for incense cedar. The sale involves some 887,000 board feet of timber valued at \$6,425.00. The power line right-of-way must be cleared by August 1.

TIMBER TAXATION

The Timber Maturity Board for Mendocino and Humboldt Counties examined properties and took action to declare young-growth timber thereon mature for assessment purposes on May 9-11 and May 16-17, respectively. Timber on 32 properties consisting of 18,584 acres was declared mature in the two counties in accordance with the provisions of the State Constitution.

NURSERY

Eight hundred fifty pounds of tree seed were sown in two of the Division's four forest nurseries to produce 3,800,000 seedlings, most of which will be available for sale during the 1960-61 selling season as one-year stock. At the Davis headquarters nursery 100,000 small seedlings were planted in tar paper containers where they will be held until the 1960-61 planting season. This type stock is produced for planting in valley and foothill areas. Late rains have delayed sowing the fourth nursery.

REFORESTATION

Select ponderosa pine trees in Calaveras and Butte Counties were pollinated with ponderosa pine pollen collected from trees in Santa Cruz County and Apache pine pollen obtained from the Forest Service, Institute of Forest Genetics at Placerville. This experimental project is designed to produce rapid growing, drought resistant hybrid pines. In searching for cone flowers to pollinate only a limited number was found and as these flowers will produce next year's cone crop, seed collection for 1961 will produce little for nursery and reforestation uses.

A survival count was made of trees planted in the spring of 1959 for cooperative reforestation studies in Calaveras County on land of a timber holding corporation. A portion of the studies was to compare survival of one and two-year ponderosa pine seedlings from the nursery; survival of one-year seedlings was 79% and two-year seedlings 73%. Survival of white fir and Sierra redwood planted for the studies was very poor.

The Advisory Committee to the State Forester on Reforestation Methods and Procedures held its spring meeting at the Amador County Airport in Jackson the afternoon of May 26, 1960. A new chairman and vice chairman were elected and comprehensive reports of reforestation activities as conducted by organizations represented by members of the committee were presented. An increased interest in experimental reforestation is quite evident throughout the State. On May 27, the committee took part in a field trip to three reforestation studies areas; one established in 1951 by a timber holding corporation on a fresh burn; a second established in 1959 by Division and corporation personnel, and the third set out this spring on a burn of 700 acres, occurring in July, 1959. All three reforestation studies are located in Calaveras County. Some 300 acres of federal land, included in the July, 1959, burn were planted by the Forest Service. A tree planting machine was used on less steep terrain which reduced planting costs considerably. The work was explained by a representative of the Forest Service.

PEST CONTROL

Personnel from the Division participated in a training school conducted by the Forest Service on the control of forest insects and diseases. The meeting was held in Burney, Shasta County. The purpose of the school was to exchange ideas and practices in the control of forest insects and disease common to the area in the Sierras from Plumas County northward. People attending the school were particularly interested in the insecticide lindane, its application and success in controlling bark beetles.

A cooperative administrative study concerned with the effectiveness of the antibiotic Acti-dione in killing blister rust cankers on sugar pine has been initiated in the area surrounding the Gualala Lookout in southwestern Mendocino County. Plots where infected trees are located will be established to determine the most effective time of year to treat and kill the cankers. The area is the most southerly blister rust infection center in the Coast Range. The cooperators are the Holms Timber Industries, S.C. Rudolph Lumber Company, U. S. Forest Service, and Division of Forestry.

The Animal Sub-committee of the California Forest Pest Control Action Council met in the Korbelt area of Humboldt County with representatives of the Division. The purpose of the meeting was to view the destructiveness of the damage of bear and deer upon forest trees and seedlings. Seeing the damage caused by deer and bear indicated the need for control of these animals in reforestation work. The Sub-committee will make a report and present its recommendation to the annual council meeting.

RANGE IMPROVEMENT

Opportunity was afforded ranchers in northern Sonoma County to view progress on the Cascade Range Study by a field day on May 18 arranged by the Sonoma County Farm Advisor. About forty acres of heavy brush and black oak was cleared in 1958-59, and seeded with the range land drill in the fall of 1959. Two pastures were established: one was seeded to perennial grasses, the other to annuals. An excellent stand has been obtained on both pastures. The Cascade Range Study is one of several field studies being conducted by the California Division of Forestry and the University of California Agricultural Extension Service.

A demonstration of the Marden Brush Cutter as a tool for clearing range land was held on the Ranchita Range Study Area in San Luis Obispo County on May 25.

When powered by a tractor equivalent to the Cat D-8, this machine was quite effective in cutting and mulching medium brush on slopes up to about 30 per cent. This equipment also has application to other forestry uses, such as preparation of sites for planting forest trees, clearing firebreaks, and similar jobs. The equipment for this demonstration was provided by a local dealer who handles the Marden Brush Cutter.

ENGINEERING

A producing well has been developed at the Alder Conservation Camp site in Del Norte County.

On April 27th a jet fighter lost a fuel tank over the Puerta La Cruz Camp. There were no injuries, however, the impact of the tank in the area between the butane tank and the CIM office shattered some screens and windows, damaged the yard and some concrete curbing, and the fuel splattered over the side of the CIM building damaging the asbestos siding which must be replaced. Total estimated damage is in the neighborhood of \$600.

Sites were reviewed for conservation camps in Lake and Sonoma Counties, and two locations were located. "Sea View" in Sonoma County is approximately 22 miles from Guerneville and two airline miles from the ocean at an elevation of 1,250 feet. "Konocti" Camp site in Lake County is five airline miles due west of Lower Lake and at the head of a small valley, elevation is 2,000 feet.

As of May 2nd two delineators were given an assignment to work on the preparation of the report for the Recreation and Planning Committee.

The Department of Finance has approved the contract for the construction of the Ahwahnee Residence.

A residence site was chosen for the new Mountain Home Conservation Camp in Tulare County.

Bids were opened for the Oroville Shop and the low bid was \$26,369.

TWO NEW BOARD OF FORESTRY MEMBERS APPOINTED

Governor Edmund G. Brown announced the appointment of two new members to the State Board of Forestry.

They are Brigadier General Frank Myers, Fallbrook, a retired Marine officer, and Paul Aurignac, San Ardo, a cattleman. The appointments, for four-year terms, are subject to Senate confirmation.

General Myers succeeds Domingo Hardison, Santa Paula, and Aurignac succeeds John Baumgartner, Jr., San Martin. The terms of both Hardison and Baumgartner expired. Hardison had been a member of the Board since January, 1944, and was Chairman since April, 1959. Baumgartner had been on the Board since March 30, 1956.

General Myers, a Democrat, first joined the Marines in 1916 after attending state college in Iowa. He went on inactive duty in 1919 and returned to active duty in 1940. He was corps shore party commander for the assault on Okinawa during World War II and was honored for meritorious service. He went on inactive duty in November, 1946.

He came to California in 1922 and was employed as a surveyor. He joined the engineering staff of the City of Oakland in 1924 and worked there until 1953, except during the war. He progressed from draftsman to supervising civil engineer. After retiring from the Oakland job he moved to Fallbrook, where he owns an avocado grove.

Aurignac owns a cattle and grain ranch. A Republican, he is a member of the executive committee of the Monterey County Water Commission, of which he has been a member since 1942. He is chairman of the Monterey County Committee for School District Reorganization, a director of the Salinas Valley Fair and a member of the Board of Forestry's advisory committee on range management. He was born in France and has been a U. S. citizen since 1936.

The seven-member Board of Forestry determines general policy for the Division of Forestry in the State Department of Natural Resources. The Board represents State interests in the acquisition and management of State forests and in federal land matters pertaining to forestry. The Board also concerns itself with the State's interest in forest resources on private lands and is responsible for establishment and maintaining forest policy.

STATE BOARD OF FORESTRY MEETS

A record meeting of the California State Board of Forestry was held on June 10 at the headquarters of the Ventura County Fire Department, Santa Paula. The Board reviewed forest, range, and watershed protection problems of Ventura, Santa Barbara, and San Luis Obispo Counties and the Los Padres National Forest. On June 8 and 9 the Board made a two-day field trip through the area to see brush-range improvement studies, private range improvement projects, the Public Law 566 (small watershed) project, the Associated Insectry, reservoir and dam sites, and erosion problems resulting from wild fires. The next regular meeting of the Board of Forestry will be held on July 14 at Placerville to conduct routine and special business. On July 13 and 15 a field tour will be conducted and the Board will tour the plant of the Michigan California Company office at Camino and visit salvage logging operations; look over new plantations of the company, and U. S. Forest Service Icehouse fire area; and will visit the Icehouse dam and reservoir of the Sacramento Municipal Utility District. If time permits, a visit will be made to the U. S. Forest Service "Seed Tree Orchard." On July 15 the Board and group will tour the Squaw Valley area, and then will continue to the Soda Springs snow lab which is under the direction and supervision of the Pacific Southwest Forest and Range Experiment Station.

F. S. X. CLUB OF CALIFORNIA

Old Friend, Woody Metcalf (of 1992 Yosemite Road, Berkeley 7) has sent to the Newsletter a congenial invitation to all old-timers of the Division of Forestry, active and retired, to become members of the F. S. X. Club. The gang meets every three months and listens to some casual talk or arranges for an easy field trip such as a recent visit to Angel Island. At the moment there are some 50 members. Woody signs himself "Scrivener", which appears to mean he will gladly receive your single dollar for annual membership dues, but he will be happier to welcome you in person to the F. S. X. Club.

25-YEAR CLUB REVIEWS CONSTITUTION AND BY-LAWS

The Board of Directors of the California Forestry 25-Year Club met on

May 23 in the Rosemont Cafe in Sacramento, and on June 18 in State Office Building No. 1, to discuss the constitution and by-laws of the organization.

Club President, Cecil Metcalf, Vice President Fred Herbert, and Secretary-Treasurer Frank Cameron, met with the newly appointed board which consisted of chairman Miles Young, Miss Nell Weldon, and Fred Dodson (retired.)

In reporting on the meetings, Herbert indicated that the present constitution and by-laws was searched for minor discrepancies and descriptive terms which might not reflect the original collective thinking of the group.

Whether any changes have been proposed was not announced. Herbert did say that when the work of the board was completed, a draft of its recommendations would be submitted to the officers and members prior to the clubs next annual meeting.

NOW, THAT IS A SWITCH!

All California foresters of this generation have heard the present-day "old-timers" tell how the Sierra forests used to be much more free of brush and undergrowth than they are now. These sincere, earnest, and sometimes vociferous people usually believe that this open condition was the natural and proper one, and that the present thick growth of young trees and shrubs decreases stream flow and indicates mismanagement of our forest lands. The following quotation of nearly 65 years ago describes a public viewpoint completely the reverse of that philosophy. It is from "Forest Reservations: with a Report on the Sierra Reservation, California", by William R. Dudley, in the Sierra Club Bulletin of January, 1896, pages 254-267.

"The general testimony of the mountain and foot-hill people in regard to the changes that had occurred during the past ten or twenty years in the vegetation of the mountains is not uninteresting. They assert that the undergrowth in the mountain forests has greatly decreased since sheep-herding came into the mountains. At present one can ride a horse anywhere through these high mountain forests, excepting in the inaccessible rocky places, while twenty years since it would have been almost impossible to have wandered far from the trails, on account of the underbrush, undoubtedly more dense than in the Northern Sierras. The sheep live on the young twigs of these undershrubs and on the small annual plants under the trees. The herders add to this destruction, as they pass out of the forest in the autumn, by setting fire to this undergrowth, in order to insure an abundant growth of tender sprouts in the spring following. The ranchmen believe this decrease in the undergrowth decreases the stream-flow in the valleys below during the summer, the water from the melting snows having little to hold it in check. They regard the destruction of the underbrush as more detrimental to the streamflow than the destruction of the timber ... Formerly many living springs were to be found on the ranches of the White River Valley, all of which now run dry in midsummer."

Apparently the "good old days" are the days of our youth, and they change with every succeeding generation.

NOTE: It should be mentioned that Professor Dudley's statement was based on more than casual knowledge. He and Frank Lamb of Stanford University spent July and August of 1895 zigzagging through the White River, western Kern, Tule and Kaweah River forests from Glenville north to Sequoia National Park. He says, "Whenever we met a

native rancher of the foothills, or the hunter and camper from the valleys, we discussed the utility and desirability of the reservations, and endeavored to get their point of view". They also collected 800 species of plants and Dudley goes into detail in describing the vegetation around Summit Lake at the head of the Wishon Fork (North Fork of the Middle Fork) of the Tule River. (He called it Mountain lake, and, in common with other travellers and mapmakers of that time, he called the Wishon Fork the Middle Fork. What we now refer to as the Middle Fork, was then called Nelson's Fork).

Floyd Otter, Forest Technician
Mountain Home State Forest

Hey Jack! Put out that fire!
Don't let the flame leap any higher.
Stamp it!
Tramp it!
Damp it!
Don't let a forest fire sprout,
Just be sure the flame is out!

WINGED FIRE-SPREADERS

Birds can and do start fires. This fact is known in England but little recognized here. There are a few records for the U. S. -- sufficient to suggest that a closer look into the matter would be illuminating.

Ornithologist Maurice Burton, in his remarkable book Phoenix Re-born (Hutchinson of London, 1959), has established that certain birds have an affinity for fiery substances. Birds of the crow family--susceptible to bright objects anyway--are especially attracted to lighted cigarettes; it is not unusual for tame crows, rooks, jackdaws to steal lighted cigarettes and to "ant" with them. "Anting" with embers is perhaps the most fantastic aspect of this picture.

The bird behavior known as "anting" has to be seen to be believed. The bird appears to be in its last throes, demented or ecstatic as it goes through motions akin to preening but greatly speeded up or dramatically statuesque, according to the species. Early observers of this strange behavior noted that the bird had an ant in its bill which it passed rapidly along the underside of the wing. Thus the term "anting" arose, though it may be performed with or near other objects of an aromatic or fiery nature.

But this is not all. Dr. Burton has demonstrated beyond a shadow of a doubt that an anting bird is neatly equipped to make like a bellows. His pet rook loved to play with fire (set by Burton), cast embers about and fan them into flames, igniting combustible material nearby. His movies of Niger "disporting itself on a heap of burning straw" are creating quite a stir in England.

This playing with fire is not confined to aviary birds alone. Dr. Burton cites numerous instances where wild birds have been suspect--by carrying glowing cigarette butts or other smouldering substances to their nests. He has observed birds anting over heath fires and states that it is common to see a variety of birds gathering at the edge of bush-fires, supposedly to harvest the routed insects (or possibly to snatch at embers?).

The implications are sobering. To what degree are birds responsible for sprouting and spreading fires in Southern California? A wealth of information is needed before this question can be answered... Please send any leads on bird-caused

fires to: Jeanne Moore Goodman, Cedar Crest Cabin, Fallsvale, California. If possible, indicate the species of bird involved, the agent causing the fire (match, cigarette, ember, etc.), the extent of damage to the bird (if any) and to the bird's "home" (nest, roof top, palm tree, billboard, cabin, etc.).

WHAT MAKES FIRE?

The following article was obtained from the Ansul Chemical Company's monthly publication. We have taken the liberty of implying that all chemicals rather than just dry chemicals can be used to help extinguish a fire. The article was written by Arthur B. Guise, Director, Development and Design, Mechanical Products, Ansul Chemical Company.

"Combustion has been defined as a heat-producing chemical process. Flame is not necessary for combustion --it occurs when iron rusts. At the other extreme, the explosion of hydrogen with oxygen is combustion at a temperature of 3,000 degrees centigrade. Combustion does not require oxygen--in fact, magnesium burns in nitrogen. Given a high enough temperature, three well-known substances--hydrazine, hydrogen peroxide and ozone-- will burn in a vacuum. This is one reason why hydrazine and hydrogen peroxide are used widely as rocket fuel.

"Fire is combustion which is intense enough to give off light as well as heat. It can be a shattering explosion of dynamite or a quiet flame on a kitchen gas burner. Flame is actually an open ended explosion--kept from blowing itself out by controlled feeding of fuel and a lack of confinement.

"When you look at a flame like the one on the kitchen stove, most of what you see is the combustion wave--the area of intense burning. The combustion wave is started by first bringing the pilot light flame to a small area of the gas escaping from the burner. As this area flames up, heat flows into the next layer of unburned gas which begins burning and so on. If the fuel flows from the burner at the same rate that the flame burns it up, the combustion wave is established. Imagine a zone of gas vapor which is approaching a combustion wave. At first it just absorbs heat from the front of the wave. When it reaches a hot enough part of the wave, it breaks into rapid chemical reaction and we see flame. As it burns, it begins to generate heat and finally gives to the next zone of gas exactly the same number of calories or units of heat which it absorbed as it burst into flame.

"The gas within the combustion wave is expanded by its heat, giving a thrust which raises the pressure in the unburned gas ahead of it. In an unconfined flame, the force is small, but if it is a very fast burning mixture which is also confined in some way, the thrust and the burning velocity combine to produce a shock front in which the pressure and temperature rise sharply. This is a detonation wave which travels several miles per second. It is maintained by the energy released in the chemical reaction. When the original fuel is high explosive such as TNT or nitroglycerine, the pressure in the shock front can be as much as 100,000 or 200,000 times normal atmospheric pressure. The understanding of combustion waves has led investigators even deeper into the nature of fire. Recently, scientists have taken a hard look at just exactly what goes on across a combustion wave. Their findings have led to the belief today that heat is not the only or even the most important agent needed to touch off flame or explosion. A chemical process called the branching of reaction chains is also important in supporting fire.

"There are two kinds of reaction chains, branched and unbranched. The unbranched chain occurs most frequently in chemical reactions when two chemicals unite to form a new substance--for instance when hydrogen and chlorine combine to make hydrochloric acid. In this type of reaction, the molecules of hydrogen and chlorine divide and join each other to make a firm bond, creating a stable substance.

"Branched chain reactions are comparatively rare in chemistry, but we do know of a few everyday examples. One is the drying of paint. In this reaction, the molecules of paint split and shatter as it is sprayed or brushed on and comes into contact with molecules of oxygen. The reaction turns the oil in the paint to an unstable substance which slowly decomposes, giving off fragments of its molecules called free radicals. Unlike the reaction between hydrogen and chlorine, these free radicals are able to react within the paint itself to make a number of different molecular combinations. Thus, two free radicals with the same atomic construction can begin two entirely different chain reactions which will eventually link with each other and with other chains. The resulting cross linkage of molecules produces a tough three-dimensional coating which is very stable and impervious to water.

"Essentially the same type of reaction as the drying of paint goes on across the combustion wave of a flame. Paint gives off heat as it dries, but the reaction goes on at a temperature low enough so that there is no explosion or flame. When a substance like gasoline or wood burns, the branching of reaction chains proceeds much faster because of the higher temperature.

"The free radicals loosed in this combustion wave do not have the same atomic construction as those freed during the paint-drying process. However, they have the same ability to interact with oxygen and with other free radicals in a number of ways. They are capable of starting branched chain reactions. Without the branching, which is the intermediate stage between the original fuel molecules and the end products of the fire, there could be no flame.

"A pile of oily rags produces spontaneous combustion whenever the chain reaction between oxygen in the air and the oil in the rags generates heat faster than the air around the rags can take it away. As the temperature rises, the chain reaction goes faster and faster until the rags burst into flame. The same thing happens when a Boy Scout rubs two dry sticks together as he tries to light his wood shavings. Eventually the friction begins a chain reaction between the molecules of wood constituents and oxygen and there is flame.

"The principle of branched reaction chains has finally helped us to determine why chemicals extinguish a fire. (Their) particles capture the free radicals in the combustion wave and arrest the chain reaction

"When there are enough chemical particles in a given area to capture most of the free radicals, the chain reaction is stopped short.

"For years, we have been taught that three things are needed to support fire---oxygen, heat and fuel. Now, it seems that the fire triangle should really be a fire square with the chain reaction flame mechanism added as the fourth side. A fire may have the first three, but if the chain reaction is interrupted, it will go out. Other extinguishing agents may act in other ways on this fire square removing oxygen, heat or fuel from the fire.....chemicals apparently function almost exclusively by interrupting the flame chain reaction."

Clint Phillips
State Forest Ranger

HOW TO BE AN OUTSTANDING FAILURE

"Anybody can resign a job, but it takes a genius to run one all wrong." Here are 25 sure-fire ways to ruin executive careers. How many do men in your organization use?

One of the easiest achievements in executive life is mediocrity, in which neither the executive nor his work is much noticed until one day he disappears and is replaced by a man the company hopes will do better. Anyone who can get into executive ranks can achieve mediocrity without half trying.

Being a big success, growing in the job, and moving on into bigger responsibilities is a good deal harder, as any enterprising management man can tell you, from his own experience and from his experience in developing the men under him.

It is a lot harder, however, to be an outstanding failure, the kind of rocket that gives as brilliant a fizzbang coming down as it did going up. This is probably because so few executives have studied the principles of failure.

For management men tired of being lectured - - or lecturing a subordinate - - on how to be a successful executive, Modern Industry has compiled this Checkup Chart on How to be a Failure.

Only an amateur will limit himself to two or three or half a dozen of the bad habits listed here. A man who wants to make a name for himself will try all 25. Even men totally uninterested in being failures may find the list worth-while, for a jest is a two-edged sword. There's many a how-to wrapped up in a how-not-to.

1. If a subordinate makes a mistake, let him have both barrels, preferably in front of others.

He'll be taught a good lesson; namely to cover up future errors instead of airing them so they may be corrected promptly.

2. Never accept responsibility for a decision if you can possibly avoid it.

If you don't accept a responsibility in the first place, how can you be held responsible for falling down on it? This assures you of getting nowhere, because the bigger and better the job, the more the responsibilities attached. If the company wants firm answers to problems, let it rent an electronic computer.

3. If you came up the ladder in a specialty, stay in that specialty. If you're an engineer, don't go poking around in sales or employee relations, or purchasing or public relations.

If the company wants an all around management man, let it pick one in the first place, and leave you where you are.

4. Develop your ability to pass the buck--take private lessons at night, if need be.

There's nothing better to give both subordinates and superiors a short, clear picture of just what kind of person you are. They'll fight for the privilege of wrecking you.

5. Keep your nose to the grindstone, don't expose yourself to new ideas by getting out and mixing with other men in your own or other plants.

It is better to wear out your nose than your brains.

6. If a superior gives advice, endear yourself to him by letting him know you really don't need it because you know everything already.

He may believe you, to the extent of setting you free to seek a career elsewhere more worthy of your talent.

7. Keep your finger on every little detail of your work, every day, relentlessly.

This way you will never have time to look ahead at your future problems or plans for your major tasks.

8. Never consult with others in arriving at decisions; don't discuss anything with anyone! Always talk, but above all never listen.

They might help you to come to better decisions. But by ignoring others, you may soon come to be known as the Lone Wolf of the Acme Broomstraw Corp., or what ever concern you are associated with. And you can imagine how good that will look in your obituary.

9. Never teach a younger man how to do your job or fill your shoes after you've moved up.

If the company has no subordinate capable of replacing you, it won't be able to advance you. You might even be allowed to make room for someone who can train replacements.

10. Never check up your health, or if you do, pay no attention to the doctor's advice.

There is probably no more dramatic way to demonstrating your inability to fill a job than to drop dead. Even the most optimistic and lenient company is apt to be convinced by such a gesture.

11. If your secretary wants to take her shoes off in the office, make your desk a dressing table, receive long personal phone calls, and in general act homey--encourage her.

Has double-barreled effect; it cures her of any disposition toward efficiency; and it marks you as a man who can't run even a two-desk office.

12. If company policy make you take vacations, worry about who's whining while you're away and how the job's being done.

Spoils your vacation, guarantees you won't benefit from it -- and neither will the company. Also tips everybody off that if you're so worried lest someone usurp your position there must be a reason for your sense of insecurity.

13. If you find that a couple of cocktails before dinner relax you, try six or eight.

Why not get good and relaxed? If this doesn't work fast enough, try relaxing mornings.

14. Be so impatient for advancement that you fail to learn what your present job has to teach.

Let the company know you won't be satisfied gaining rewards the hard way, but want express service to the top. Ambition is admired, but this is different.

15. Get into office politics, preferably with both feet; if there aren't any, start some of your own.

This way you stand at least a fifty-fifty chance of being wrong. If you use your feet, the chances increase.

16. Be sparing of praise for a job well done.

Why let people think you're soft-hearted and can be won over by intelligent work? Might make you popular and you don't want that!

17. Be sure to stick your nose into the gripe and grouse sessions of your subordinates.

Cuts you down to their rank, makes you one of the boys instead of a leader and the representative, to them, of the company.

18. Let prejudices for and against people and methods sway your decisions; never use reason.

Men who let facts interfere with their prejudices are always coming up with the right answers. That's bad.

19. Line up a couple of outside positions to jump to in case you tire of your present position.

Shows you haven't a one-track mind, aren't a stick-in-the-mud.

20. Never bother to find out specifications for your job, nor measure your performance.

Smacks too much of a desire to know, learn, improve.

21. Similarly, keep subordinates in the dark on what's expected of them.

Confuses them, decreases their value to you.

22. Develop techniques for looking overworked.

Will give the impression you can't keep your head above water in your present position, so why trust you with more duties.

23. Be arrogant, haughty in your manner.

Creates respect on the surface, hatred underneath.

24. If good executive habits are too ingrained to abandon easily, overwork; never relax.

Gets you stale on the job, slows you down. An executive who has gone flat is as useless as one who never had a sparkle.

25. Milk your position for social prestige.

Good way to get your name in the papers while you last, interferes with performing the job for the company's sake.

LETTER TO C.P. CAMPBELL, RANGER, OROVILLE, FROM R. J. SCHWALENBERG, COORDINATOR, OUTDOOR SCIENCE EDUCATION PROGRAM, YUBA COUNTY SCHOOLS.

"We in Outdoor Education have received cooperation from your department in many ways that helps make our programs a success, and for this we are grateful.

"Because of the work and planning of Mr. Arthur Pirazzini of your Oroville office we were able to again include a days instruction in forestry in our science program. It was a great success and regarded by our professional staff as one of the outstanding class sessions of the week.

"In addition to the fine class work we will be forever indebted to Mr. Charles Copeland and all of the division's personnel for their outstanding and tireless efforts in helping us evacuate the 125 children from Butte Meadows after our unseasonal snow of May 23rd and 24th.

"It is our opinion sir, that you are very fortunate in having such men serving in the Division of Forestry. If I can ever be of assistance to you I will consider it a privilege to respond."

KINGS COUNTY

Everyone is talking about the weather. Coolest May in umpteen years around here. Spring fever hasn't arrived yet.

Also lots of talk about the BIG ones, the little ones and THOSE that got away.

Following a jump in fires last month this period over last year, we are now at a 10% decrease. We hope it's state-wide and that all predictions for high incidence are wrong.

As you no doubt know by now, Hanford is just waiting for the Armstrong Tire Company to sign on the dotted line. This new industry will bring to this area, one of its greatest needs -- fuller employment. It is anticipated the company will have 1,000 persons on its payroll. There is no doubt that other industry will follow.

A civic-minded group, within 10 days, secured enough money to establish an Industrial Foundation which procured a site for others who may be interested in establishing industry here.

I expect we'll see many changes in our little city before another year.

All's well that ends well.

Florence P. Appell, Dispatcher - Clerk

MARIPOSA COUNTY

Approximately sixty people attended an informal potluck dinner in honor of Forest Firefighter Foreman Sam Van Gundy, who retired from State Service May 1st as a result of a service-connected disability. Mr. Van Gundy plans to spend his time in retirement driving via house trailer and stopping at many coastal areas. His friends and well-wishers who gathered to honor him presented Sam (as he is better known in the Ranger Unit) a pair of field glasses and a case with which to while away the hours. M.C. for the occasion was Assistant Ranger Stephens, and retired Ranger Bruce Hufford gave a short resume of his experiences with Mr. Van Gundy during their association together.

Luther Wilson, FFTD, was recently promoted to the position of Forest Firefighter Foreman within our Ranger Unit.

Assistant Ranger Bill Jones attended an arson investigation school at Yosemite Valley.

The Old Time Miners' Festival as outlined in the March-April issue of the Forestry Newsletter went off with a big bang in the town of Mariposa, May 14th and 15th. Ranger Frank Crossfield served with several other civic-minded persons in organizing a wonderful slate of festivities and displays reminiscent of old time miners' picnics.

One of the highlights, as far as the Division of Forestry's participation, was a brush and tree display with technical names and pertinent information regarding species native to this area, which was well attended, with many favorable comments from local people. Also on display were bug species with bark samples showing the damage that is being done to the timber crop within the Mariposa Ranger Unit.

The Tug-of-War, which finally ended in a draw between the Mariposa locals and CDF team was a test of brute force and determination. An old-fashioned tug-of-war apparatus was used, consisting of redwood planks and anchor-man's harness. The men assumed a prone position on the planks and did their tugging in that manner. At the end of an hour and ten minutes the Forestry team had pulled the locals approximately two feet from the center line. The requirement for winning this contest was that the losing team must be pulled four feet from the starting point. At this time the coaches of both teams decided to negotiate a truce to avoid any further physical damage to the men. At the signal to stop tugging, ten men collapsed on the ground. Forestry members of the team included Lynn Bawden, FFTD, Lu Wilson, FFF, and Bryce Green, FFF.

Assistant Ranger Bill Jones was in charge of the display and technical assistance was given by Dean Schlobohm, Bud Wolfram, and Trainee Frank Lewis.

DISTRICT V ANNUAL PICNIC

Thomas J. Perkins

Associate State Forest Ranger

This month, as the politicians say, we are most happy "to point with pride" to our annual District V picnic, June 5th at Bolado Park.

When you consider that our District family is drawn from as far north

as Santa Cruz and as far south as San Luis Obispo you can realize how difficult it is for any one day to be the right one for everybody. June 5th was THAT day for 224 members of District V.

We were all happy to see former District Deputy Chester G. Strickland and his wife in our midst again.

Ranger Bill Wilcher and his San Benito boys were up at a "bright and early" 6:00 to build the fire for barbecued broiler-halves, mexican style beans, and cowhand java. Salads and desserts were brought individually from home to share.

The day was one of those they hide thermometers for so no one knows how hot it is, driving us into the pool early to emerge refreshed and glad to be served tall cool drinks. The children had their own soft-drink stand which did a thriving business.

And after it was all over no one was tired. Rather, they were all fired up to go back and do their usual good jobs a little better. Me? I'm all in favor of bigger'n'better District V picnics!

Eleanor Ernst
District V Office Receptionist

SOUTHERN CALIFORNIA TRAINING CENTER

On March 18th a group of 20 men consisting of 15 Forest Firefighter Foremen and 5 Forestry Work Project Foremen completed our 1959-60 Forestry Foremanship Training Course. Some interesting things happened.

Dr. Hasan Canakcioglu, Turkish Forester for the faculty of the University of Istanbul in the United States studying "Forest Fire Protection" spent 3 weeks with us at the Training Center. He was a very interesting person and well liked by all the trainees.

Dr. Hasan Canakcioglu	Orman Fakultesi
2112 Addison Street	or Büyükdere - Istanbul
Berkeley, California	Turkey

Assistant Ranger Anderson of San Diego County and Assistant Ranger Charley Van Fleet of Riverside County were commended by the group as their "out-standing instructors." Assistant Deputy Len Chatten's (Fire Control Sacramento Staff) subject, Equipment Development and Research, was considered most interesting subject presentation.

Ranger Ray Banks and Associate Ranger Hal Nixon from the Central Sierra Training Center (Sutter Hill) each spent a week with us during the course. Ranger Nixon viewed our subjects Fire: Elements, Behavior and Weather Effects; Fire: Leadership, Decisions and Responsibilities; and Fire: Size up and Initial Attack Strategy. Ranger Banks viewed "Station Administration and Supervision".

Forest Technician Bob Blanford, District VI staff, on special request from the group, gave them an evening - 4 hours - class on forest practice.

Other highlights from outside participation which added much value and interest to the course included:

George Ellis, meteorologist - U. S. Weather Bureau, Los Angeles - 4 hours - Weather Effects on Fire.

Hugh Ramsdale and pilots of La Mesa Helicopter Service donated their services and time with a Bell G-2 Helicopter for approximately 4 - 5 hours for our subject "Use of Aircraft in Fire Control".

KFMB TV Channel 8, covered our subject "Use of Aircraft in Fire Control" and gave us feature news coverage - this showed the men being trained in helicopter hose lays, helipumper operations, helitank operations, cargo and personnel transportation, etc.

Bill Richards, Safety Engineer on the west coast and Alaska for Petrolene Company gave his very excellent 2-hour presentation on "Character of Liquid Petroleum Gas".

Captains Johnson and Figley from Los Angeles County Fire Department participated in subject "Special Fires" - Control of L.P.G. and oil fires.

Richard O. Sensor - "Management Consulting", Riverside, California, gave the men 2 hours in Human Relations and the Investigator of the Los Angeles City Arson Department spent 2 hours as a part of our subject "Fire Prevention and Public Relations".

The following personnel completed our course: Raymond B. Caldwell, Visalia, Tulare County, IV; James A. Coolidge, Castle Rock, Santa Clara County, V; Julian L. Coy, Slack Canyon CDC, V; David A. Dituri, Blasingame, Fresno County, IV; George A. Dugger, San Jacinto, Riverside County, VI; Logan D. Evans, San Luis Obispo, V; Luther R. Gordon, La Mesa, San Diego County, VI; James M. Graham, Pixley, Tulare County, IV; Jeff D. Hawkins, Gustine, Merced, IV; James W. King, Miramonte, Fresno, IV; Robert L. Kutz, Central Fresno, IV; Jack McIlroy, Carmel, Monterey, V; John R. Peters, Rainbow CDC, San Diego County, VI; Richard Pilkington, Glen Avon, Riverside, VI; Marion T. Stoetzl, Los Gatos CDC Fresno, IV; Chet Stone, Dist. Hqtrs., Riverside, VI; Bill Teer, San Juan Capistrana, Orange, VI; Arthur C. Van Zeyl, Ramona, San Diego County, VI; Davis L. Westover, Etiwanda, San Bernardino, VI; Richard A. Whiteside, Minnewawa CDC, San Diego, VI; and Guest Dr. Hasan Canakcioglu, Turkey.

The training center staff wishes these men much success in their careers with the Division of Forestry.

We also wish to thank all the participating instructors and the rangers in charge of the ranger units all whose cooperation and interest in the program helped in making it a success.

During the period March 22, 23, and 24, the training center location was used for the "Law Enforcement Seminar" which included the State Forester, Sacramento Staff Fire Prevention Personnel, District Deputies Fire Prevention Personnel and County Unit Rangers. Assistant Ranger "Slim" Carlson and his men at Ramona are the ones responsible for the very excellent arrangements that were made for this group.

W. G. Francis
State Forest Ranger

DISTRICT-VI

On Dick Groninger's first day as Superintendent at Puerta La Cruz Conservation Camp, there was a swish of a jet plane as it went over the camp and then a terrific thud within the camp and Dick took to the hills with the thought, "Oh, what did I say to those Russian ski troopers". However, the airplane was not Russian, it was American and the bomblike object was not a bomb but a wing-type fuel tank (full - 200 gallons). Fortunately, there was no explosion or fire but a concrete wall and a building took a \$1,000 beating.

In mid June, at 3 a.m. one Sunday, the cry of "Fire" was heard at the same camp. Two hours later, when the local hoses and those of the Julian and Warner CDF Station fire trucks were rerolled, one could plainly see by the light of the rising sun that the inmates could no longer use their two recreation rooms. True, the outer shell still stood but the interior was only a memory. When the fire was discovered at 3 a.m., it had a good strong start but our forces contained and stopped it even though the two rooms were part of the large barracks building proper.

The Division of Forestry seems to have grown up. We note two Rangers in this district recently received 25-Year Service Awards; namely, Butch Skinner and Jimmie Fenlon; an Assistant Ranger (Charley Van Fleet of San Jacinto Station) soon to retire, Mrs. Billie Holm-Kennedy - secretary to Deputy Mace - who had a retirement banquet on June 18th, and we hear rumors that Radio Technician Harvey Gillette is contemplating retirement soon.

As is our policy, we try to write about the people, so here goes a few remarks. Gone from Orange County is tall lanky ASFR Jim Smart. Napa County is the recipient. Not quite so new at Riverside County headquarters is ex-FRPS Elmer Benson, now Associate Ranger at Perris. Gone from the same county for a few days was mechanic AMF Clif Myers. Clif flew "jet" back to Kenosha, Wisconsin, to inspect and accept three new Schedule A triple combination pumpers. Come and gone is Ranger Jack Burke who attended the Holm-Kennedy retirement dinner. And now, we are "gone to press".

Doug Glenn
District VI Dispatcher

JAMES G. FENLON, STATE FOREST RANGER, RECEIVES 25-YEAR SERVICE AWARD.

James G. Fenlon, State Forest Ranger in charge of the San Diego Ranger Unit, was recently honored when he received from the State Forester, Francis H. Raymond, an award honoring 25-years of state service. Presentation of the award took place at the Southern California training center at Ramona.

Ranger Fenlon completed 25 years of service on March 19, 1960. He started to work for the State in 1933 in the San Bernardino Ranger Unit, working with the California Division of Forestry and San Bernardino County as a forest fire patrolman. Ranger Fenlon worked in San Bernardino County until 1945 when he was assigned to the Forestry District VI office in Pasadena. In 1946 the District office moved to Riverside and Ranger Fenlon was transferred at that time also.

In 1947 Ranger Fenlon was transferred to Calaveras County where he was assigned until July 1950, when he was transferred to the San Diego Ranger Unit.

When first assigned to San Diego, his initiation to new responsibilities

among other things was the much talked about Conejos fire, which was the largest in recent times in San Diego County burning 63,700 acres in August 1950.

Ranger Fenlon resides at 325 Westwind Drive, El Cajon, with his wife Mary. They have a daughter, son-in-law, and a grandson living in San Andreas.

W. W. "BUTCH" SKINNER RECEIVES 25-YEAR SERVICE AWARD

State Forest Ranger, W. W. "Butch" Skinner was honored today before a group of over three hundred southern California foresters and fire wardens meeting at Camp Radford in the San Bernardino Mountains.

The surprise award was presented to Ranger Skinner by James K. Mace, Deputy State Forester for the Southern California District for twenty-five years of "loyal and dedicated" service with the California Division of Forestry. Deputy Mace, telling of "Butch's" many years of service said, "the San Bernardino Mountains should stand as a monument to the man who has spent nearly all of his adult life in protecting them and their residents."

Mace recalled that Ranger Skinner had started with the County Forestry in May, 1933, under Ranger Russell Smith and was assigned as Patrolman for the west end of the county with his headquarters at Alta Loma. In thosedays, he was the "Forestry" for that part of the county. After being paid on county warrant during 1933-34, he was paid by the State. For purposes of record he completed twenty-five years of service on May 11, 1960. "Butch" remembers that while both county and state warrants arrived on time, the state warrants were much harder to cash in those days.

"During the disastrous floods in March 1938", Mace stated, "Ranger Skinner worked on many life-saving and rescue operations for which he later received a letter of commendation from the State Board of Forestry." He also received a citation of commendation from the U. S. Forest Service for outstanding fire control action on the 1938 Arrowhead Fire.

"Butch" was appointed Acting Ranger shortly before he entered the Army Air Force in 1942 where he attained the rank of Major. After his discharge in 1946, Skinner returned to San Bernardino County as Ranger in charge of the State Forestry forces in the county. Ranger Skinner was appointed County Fire Warden by the Board of Supervisors and is the Chief Fire Executive in the county and Fire Advisor to the Board. In 1950 Ranger Skinner was selected by his fellow Fire Chiefs as Civil Defense Area Fire Chief and as such has command of all fire forces in the county in the event of enemy bombing or major disaster.

Ranger Skinner and his wife, Irene, reside at the County Headquarters, 3870 Sierra Way, San Bernardino. Butch has a daughter and granddaughter.

BILLIE HOLM-KENNEDY HONORED AT RETIREMENT DINNER

Billie Holm-Kennedy, Intermediate Stenographer Clerk of the District VI office, and secretary for Deputy James K. Mace, was recently honored at a retirement dinner in Riverside. A large gathering of friends from throughout District VI along with several Northern representatives joined to wish Mrs. Kennedy a long and enjoyable retirement.

Mrs. Kennedy first came to work for the Division of Forestry in 1943 and was assigned to the Riverside County headquarters at Perris where she worked for approximately two years. In 1945 she transferred to the District Office which was then located in Pasadena, and the following year moved to Riverside when the District headquarters moved.

Mrs. Kennedy lived near the District office in Riverside with her twins, a son and a daughter. She is now making her home with her daughter at 6859 De Longpre, Hollywood 28, California.

The Division will miss a loyal and devoted employee who always has a kind word and a friendly smile for everyone she meets.

SAN DIEGO COUNTY

We have been running a little behind in items for the Newsletter from San Diego County, but here are a few items that might be of interest to the rest of the Division.

On April 3 the California Division of Forestry Employees Association of San Diego County held their annual picnic at Flinn Springs Park. A pit barbecue, dancing to live music, games and favors for the kids, and liquid refreshments for adults were enjoyed by all. Seventeen prizes were given to lucky ticket holders.

Ranger James Fenlon was presented with an engraved watch by the Association to mark 25 years of service to the people of the State. Foreman Eddie Edwards and his gang on the Picnic Committee really worked to make the picnic a success and Bob O'Brien, the Engineer from Camp Minnewawa worked hard at making it a great day for the kids. Much fun was had by all.

San Diego County held its 2-day spring competitive training session in Spooks Canyon this year. Training was given in Fire Camp procedures, and Fire Control teams from the eight ASFR Districts exhibited their skill in 9 phases of our work. The Marine Helicopter group from El Toro demonstrated the new Helitank set up by dropping on fires. A new type of brush saw and use of OCD's for reaching into dangerous areas to hit spot fires was also demonstrated. The La Mesa ASFR District won the Fire Control team trophy, presented by the California Division of Forestry Employees Association of San Diego County; the Lyons ASFR District was 2nd and Julian ASFR District 3rd. Competition was close and skills exhibited by all teams were of a very high caliber.

All of us in San Diego Ranger Unit are saddened by the passing on of Francis J. Sullivan, Firefighter Foreman Dispatcher, due to illness. Sully started with the Division in San Diego County in 1946 and always gave a full measure of service to his organization. The many friends he made for the Division will miss his big smile and booming voice. We of the Division will miss his reassuring radio messages and the feeling of having someone there shoulder to shoulder with us in the tight spots during fire season.

James G. Fenlon
State Forest Ranger

SOUTHERN-CALIFORNIA TRAINING CENTER

June 10, 1960, saw the graduation of the 5th Forest Fire Truck Driver Class from the Southern California Training Center. This class opened on May 9, 1960, with twenty candidates - eighteen completed the course. W. A. Wooldridge dropped because of illness, District IV, and E. W. Few, District VI, resigned to continue his education. This was one of the youngest groups to go through the Center. Following are graduates for this class:

DISTRICT IV

Wayne F. Bender - Fresno County
Kenneth R. Foreman - Tulare County
Leo Henderson - Tulare County
Gerald L. Jay - Mariposa County
Merrit E. Koontz - Tulare County
Ross E. Sanders - Fresno County
Paul D. Taylor - Fresno County
Charles G. Vaughn - Fresno County
Dwayne P. Wilson - Tulare County

DISTRICT VI

Dale A. Barcia - San Diego County
Thorval A. Clark - Riverside County
Gary D. Little - Riverside County
John A. Loop, Riverside County
James A. O'Connor - San Diego County
Allen L. Ringler - San Bernardino Co.
Jon C. Rolland - San Diego County
Bernie M. Smith - San Diego County
Herbert D. Valley - Riverside County

The members of the staff would like to wish all the graduates the best of luck in the future and in their careers with the Division.

On May 26 and 27 the Training Center was host to the San Diego County Firemen's Association. There were about 35 firemen attending each day from nearly all departments and districts in the county. The program gave them a past, present, and future view of the Division and the Training Center and its program in particular.

This Driver Class is our last for 1959-60, and the fifteenth such class since the Training Center opened in 1957. We have also conducted two classes in Foremanship, the first being in 1958 for Forest Firefighter Foremen only, and the second being this year for Forest Firefighter Foremen and Forestry Work Project Foremen. This latter combination will continue in our future Foremanship Courses.

In the line of accomplishment, 303 drivers have entered classes and 274 have graduated and returned to field positions. In the Foreman Courses, the forty entrants graduated and are now in the field. The loss in our Driver Courses amounts to a little less than 10%. In our three seasons of operation, the trainees in courses have put in 86,408 man-hours of planned training. During this same time our participating instructors have put in approximately 7,000 man-hours of instruction. This does not include any prep time.

Participants in Training Center Classes come from the three Division of Forestry Deputy Districts, generally from San Francisco south. The instructors are Division field men from District VI, comprised of San Diego, Orange, Riverside and San Bernardino Counties.

The Training Center, under the direction of W. G. Francis, State Forest Ranger, and operated by D. L. Russell, Associate State Forest Ranger, plans three classes in Forestry Foremanship and three for Forest Fire Truck Drivers during the season of 1960-61.

D. L. Russell
Associate Ranger

THE HISTORY OF THE
CITY OF BOSTON
FROM THE FIRST SETTLEMENT
TO THE PRESENT TIME
BY
JOSEPH NEALE
OF THE BOSTON BAR
IN TWO VOLUMES
VOL. II
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AT THE SIGN OF THE
CROWN AND ANCHOR
IN THE CORNER OF
NASSAU AND NATHANIEL STREETS
1845